

Parent Perceptions of Mathematics Curriculum: Executive Summary for Participants

Research Goal

The project aimed to understand parents' concerns about curriculum reform and to identify what parents perceive as sources of communication about elementary math curriculum. Understanding parents' perspectives is essential to parental support for children's success in math. This research intended to open up home-school communication and empower parents to fully participate in their children's learning.

Research Participants

38 parents from urban and rural communities in Alberta participated in the research. The following graphs represents participants' demographic backgrounds:



Research Design

All participants completed a demographic questionnaire and participated in a two-hour focus group interview. Individual follow-up interviews were conducted with fourteen parents to elicit further clarifications about the focus group conversations. There was a wide range of opinions represented in the data. These varying perspectives were analyzed to identify themes and develop categories.

Findings

Data analysis from the focus groups and interviews lead to findings in four different areas:

1. Types of Communication

Parents acquired knowledge of math curriculum mainly through four sources:

2. Responses Toward Communication

Parents played an active role in the communication process. Their various responses to communication help us understand how parents make sense of math curriculum.

3. Parent Expectations

Parents in the study demonstrated a strong desire to support their children and help them succeed in math. They shared a range of expectations related to their children's math learning. Parent expected:

- (1) to **help their children at home**, but they tended to encounter difficulties in understanding current approaches to computation.
- (2) their **children to feel confident and successful** at home and at school, yet they might feel current approaches are more confusing than traditional ones.
- (3) their **children to develop essential skills** they perceive as necessary for success in school and beyond.
- (4) **children to be taught essential skills** <u>in</u> <u>school</u>, rather than at tutoring agencies or through extensive efforts of parents.

Publications

- (5) **curriculum and teaching resources to be clear** to parents, and to be compatible with how children learn.
- (6) **teachers to be sufficiently prepared** to meet the demands of the current curriculum.
- (7) evidence justifying the change to curriculum. Overall, parents considered the former curriculum to have been successful and felt that the evidence, rationale and justification for curriculum changes had not been successfully communicated.

4. Multiple Strategies

A common topic identified in the research was parents' perceptions of multiple strategies. In the interviews, multiple strategies were referred to over 400 times. Opinions of this teaching strategy were varied. However, there is clearly a need for clearer communication about this approach.

To date, information from this study has been shared and published at several national and international academic conferences, including: AERA (American Educational Research Association), CMESG (Canadian Mathematics Education Study Group), CSSE (Canadian Society for the Study of Education), NCTM (National Council for Teachers of Mathematics), and PMENA (North American Chapter of the International Group for the Psychology of Mathematics Education). The researchers have submitted an article for publication for the first two areas of study and are currently involved in writing and editing articles for areas 3 and 4.

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